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# Zika Virus:

## What you need to know

City of Annapolis  
Office of Emergency  
Management

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Adapted from the Maryland Department of Health and Mental Hygiene



# What is Zika?

Transmitted primarily by mosquitoes and more recently sexual contact

Largest concerns:

- Pregnancy Complications
- Guillain-Barre Syndrome

Single stranded, enveloped, RNA virus

In the same family as Yellow Fever, West Nile, and Dengue

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# Zika Virus History

- **First discovered in 1947 in rhesus monkeys in Uganda**
- **Recorded to be found in humans in 1952 in Uganda and Tanzania**
  - **Cases spread throughout Africa and Asia from 1952-1970s**
  - **First case outside of Asia and Africa was recorded in 2007 in Yap, a small island in the western Pacific Ocean.**
  - **Outbreak in French Polynesia began in October 2013**

# Zika Virus Transmission

- The Virus is spread primarily through mosquitos
- Sexual transmission has been recorded; however, there are still many unanswered questions in this regard.
- One case has been documented as a result of a blood transfusion
- At this time, there are NO confirmed cases of the Virus being transmitted through organ or tissue donation.
- Zika patients do not need to be isolated.

# Zika Virus Infection

- The Virus' incubation period is typically between 3-5 days; however, it can last up to 14 days
- 80% of infected victims will not experience symptoms
- Zika has a very brief illness duration
  - Symptoms usually last for less than one week
- The illness is generally mild, but complications are serious
- In the event that a pregnant woman is infected with the Zika virus, the baby could be subject to a congenital abnormality called microcephaly.

# What is Microcephaly?

- **Microcephaly: a congenital condition resulting in abnormal smallness of the head due to incomplete brain development**

# Zika Virus Symptoms

- **Fever**
  - **Rash**
  - **Conjunctivitis (Pink Eye)**
  - **Arthralgia (Joint Pain)**
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- **Other secondary symptoms may include: Myalgia (Muscle Pain) and Headache**

# Zika and Pregnancy

- Increased cases of microcephaly recorded in Brazil beginning in late 2015
  - Evidence and clinical studies now implicate Zika as the cause
  - Rate has risen 10-20x passed the average
- Pregnant women who have traveled to affected areas should be tested as soon as possible
- The CDC currently recommends pregnant women defer travel plans to areas with ongoing transmission



# Areas of Ongoing Zika Transmission



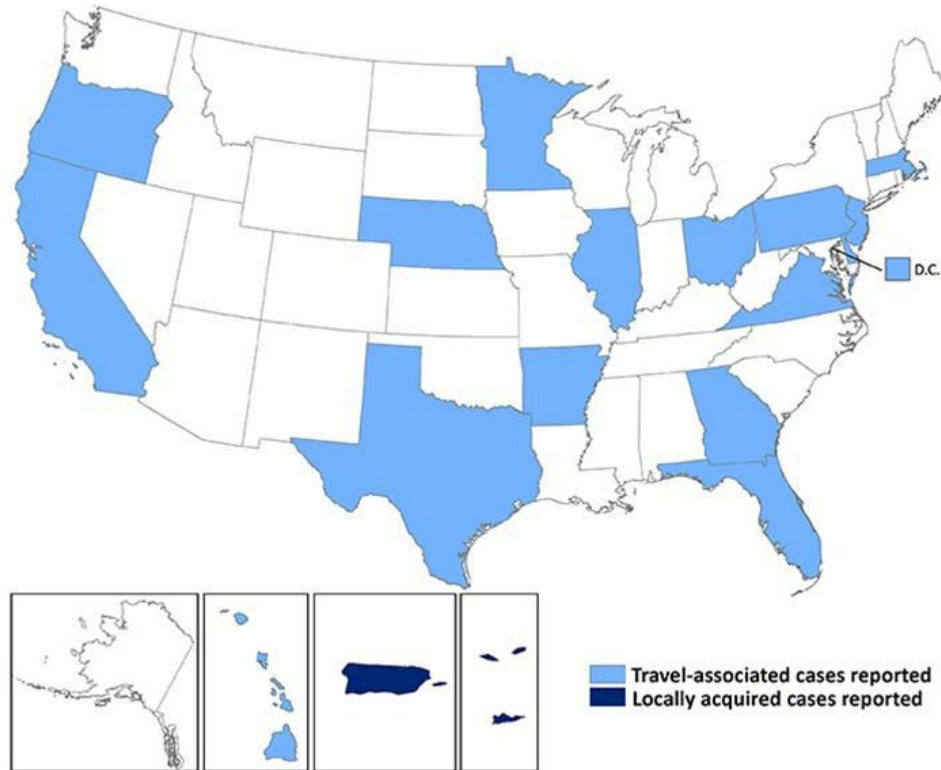
# What does this mean for Annapolis?

Testing is now available at the Maryland Department of Health and Mental Hygiene (DHMH) public health laboratory in Baltimore

The State Department of Health is maintaining surveillance of the Virus, microcephaly, and the mosquito population

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# Confirmed Cases of the Zika Virus in the U.S.



# States with High Potential for Zika-Infected Mosquitos

Approximate distribution of *Aedes aegypti* in the United States\*



Approximate distribution of *Aedes albopictus* in the United States\*



\* Maps were developed by CDC using currently available information. Mosquito populations may be detected in areas not shaded on this map, and may not be consistently found in all shaded areas.

# Threat to Maryland as of February 2016

- No locally acquired mosquito borne cases have been reported within the continental U.S., however, there have been 8 cases acquired in Puerto Rico and 1 case in the U.S. Virgin Islands
- There have been 52 travel-associated cases
- The CDC is expecting the number of travel associated cases to increase, which could result in the local spread of the virus across the US
- Over 80% of cases will go undiagnosed due to a lack of symptoms

# Testing and Treatment

## Testing

- A blood or urine sample can be tested to detect the Zika Virus in the first week of illness onset
- Testing is now available at the Maryland Department of Health and Mental Hygiene public health laboratory
- Commercial testing is not yet available

## Treatment

- No specific antiviral treatment
- No vaccine
- Recommended: Rest, fluids, anti-nausea medication
- Avoid aspirin until Dengue is ruled out

# Some Roles of Hospitals in Treatment

- Obtaining and transporting specimens for testing will allow health professionals to learn more and develop an antiviral to the Zika Virus
- Reporting cases of Zika, microcephaly, pregnancy complications, and Guillain-Barre Syndrome
- Assist in the monitoring and special treatment of pregnant women exhibiting symptoms
- Disseminate information to the public and clinicians around the country

# Government Resources to Fight the spread of the Zika Virus

- **\$1.8 billion in emergency funding has been requested by the Obama administration to be dedicated to fighting the Virus and eliminating mosquito populations that may carry it.**
  - **DHMH is working with the MD Department of Agriculture to develop environmental controls**
- **Different mosquito traps are being used than in previous cases for West Nile Virus**
- **Widespread public education**



# Zika Virus Questions/Comments?

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# General Questions/Comments?

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